

US EPA ARCHIVE DOCUMENT

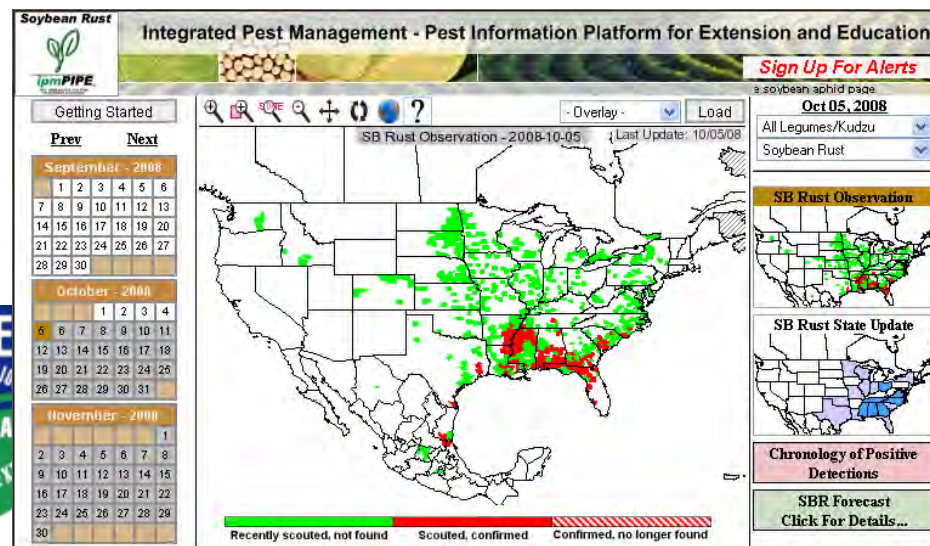
The ipmPIPE: Next generation of integration in IPM

Martin A. Draper
National Program Leader - Plant Pathology



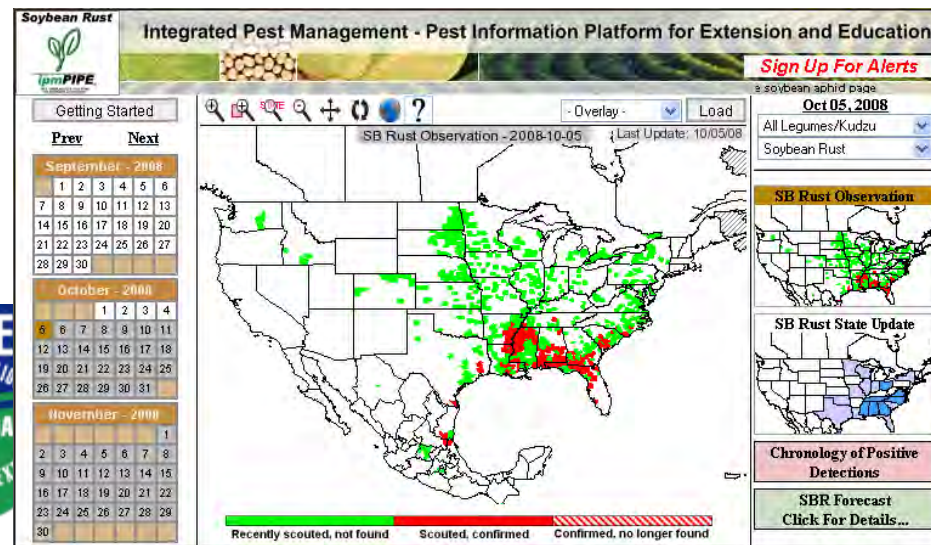
What is the ipmPIPE

- Born from the need to track soybean rust.
- A vehicle for near real-time integrated pest management (IPM).
- An information technology platform for communication – a Pest Information Platform for Extension/Education.
- Together, the ipmPIPE!



What is the ipmPIPE

- ipmPIPE concept:
 - High consequence pests that occur over a wide area can be tracked.
 - With sufficient communication, management can be enhanced.
 - Hosting the IT platform is plastic and dynamic.
 - Tools are chosen to fit the pest.



Why so many different pests?

- The IPM-PIPE is a...



 **VERSATILE**

tool!



Why so many different pests?

- The IPM-PIPE is...

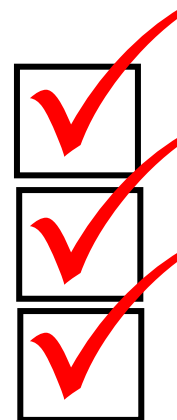


Adaptable



The IPM-PIPE is...

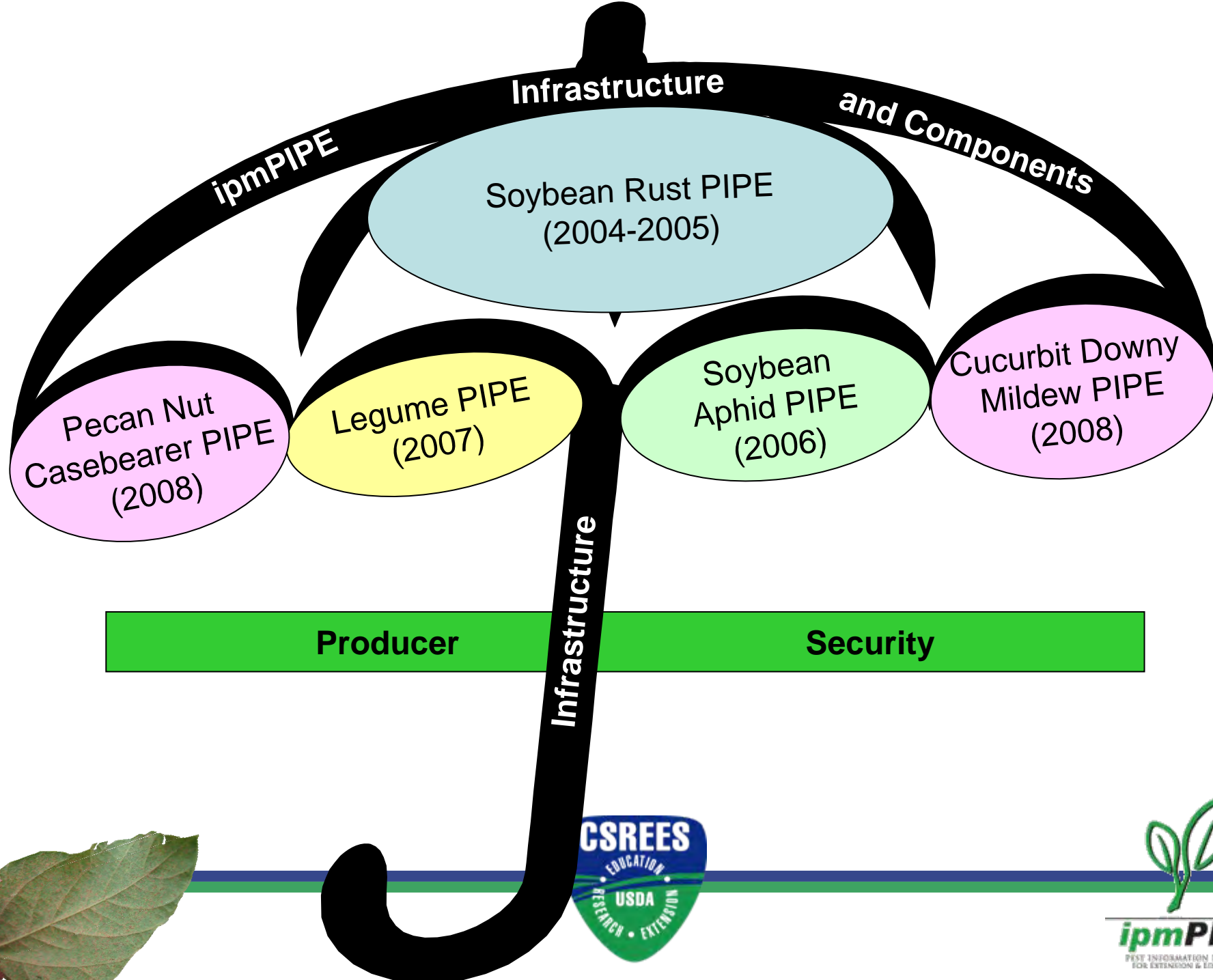
- Real-Time advisory
- Planting decision aid
- IPM actions decision aid



The IPM-PIPE is...

- NOT a





National Pest Management Programs

- Classic Early Detection – Rapid Response
- APHIS-PPQ model
 - Prevention
 - Preparedness
 - Response
 - Recovery
- How does CSREES and the LGU system fit in the model?



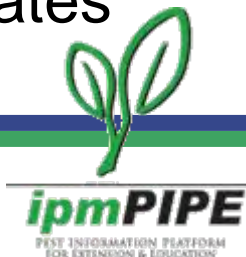
National Pest Management Programs

- Key elements of EDRR
 - Prevention/Recognition
 - Education – LGU Extension, NPDN First Detector Program
 - Detection – NPDN First Detector Program, IPM-PIPE
 - Preparedness
 - Identification/Confirmation – NPDN and APHIS-PPQ
 - Response
 - Regulatory officials including State Departments of Ag
 - Recovery
 - ARS, RMA, National Plant Disease Recovery System, and locally with LGU cooperation

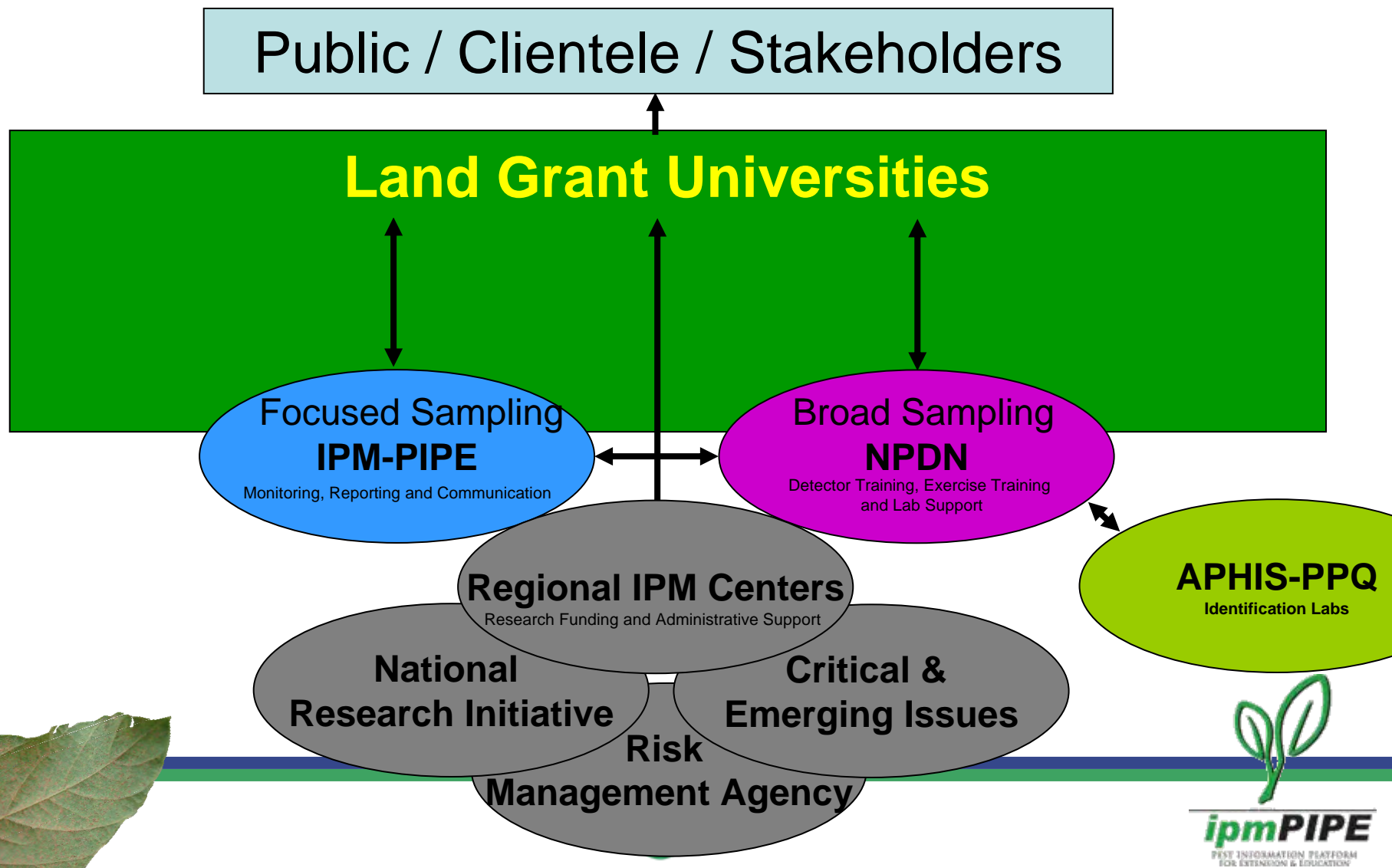


National Pest Management Programs

- ***First Detector*** Network
 - A component of the National Plant Diagnostic Network
 - Raises awareness – Trains for proper response
 - Training components
 - **Module 1:** Crop Biosecurity and the NPDN
 - **Module 2:** Monitoring High Risk Pests
 - **Module 3:** Quality and Secure Sample Submission
 - **Module 4:** Art and Science of Diagnosis: Arthropods and Plant Diseases
 - **Module 5:** Exercise Scenario Training
 - **Module 6:** Effective Photos for Digital Sample Submission
 - Set for launch this spring – online interactive training
 - Implementation of ***First Detectors*** vary among states

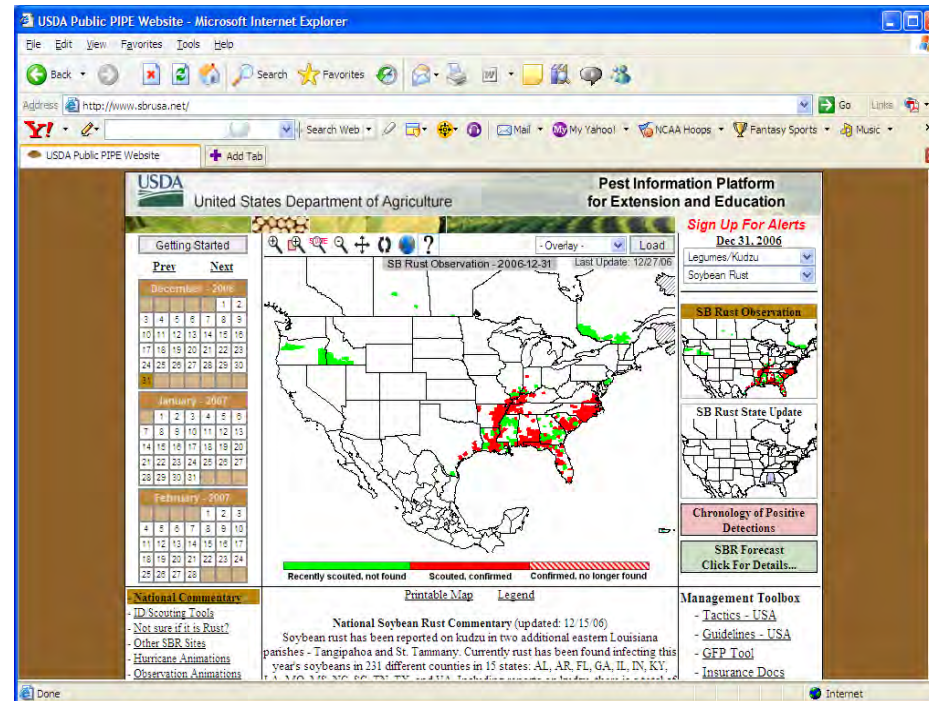


How do we all fit together?



National Pest Management Programs

- ***IPM-PIPE***: Pest Information Platform for Extension/Education
 - Multiple components
 - Detection
 - Reporting
 - Risk assessment
 - Communication
 - Observation network
 - Repeated and Single observations (*Sentinel*⁺)



ipmPIPE
PEST INFORMATION PLATFORM
FOR EXTENSION & EDUCATION

USDA United States Department of Agriculture
Information Platform for Extension and Education

Sign Up For Alerts
Aug 22, 2006
Legumes/Kudzu
Soybean Rust

Observation Map

E-Mail Alerts

Pest Navigation

State Commentary

Disease Forecasting

Management Tools

National Commentary

Historical Reference

SB Rust State Update - 2006-08-22

SB Rust Observation

SB Rust State Update

Chronology of Positive Detections

SBR Forecast Click For Details...

Management Toolbox

- Tactics - USA
- Guidelines - USA
- GFP Tool
- Insurance Docs
- Commentary Chron

National Soybean Rust Commentary (updated: 8-21-06)

The latest soybean rust find was reported in a sentinel site in Canine, central South Carolina (8-21). This is the first report of soybean rust in the Southeast and the farthest north reported in 2006. Also on 8-21, Florida reported soybean rust in two kudzu sites in Hernando County. The last infections in this county were observed in the beginning of the year before the February frost. Soybean rust was reported on 8-20, on kudzu near Dayton in Liberty County, Texas. Currently rust has been found infecting this year's soybeans in 15 different counties in AL, FL, GA, LA, MS, NC, SC, TN, VA, and WV.

Observation Map

Prev

July 2006

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	

August 2006

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	

September 2006

1	2	3	4	5	6	7	8
9	10	11	12	13	14	15	16
17	18	19	20	21	22	23	24
25	26	27	28	29	30	31	

Today Within 3 Days Over 3 Days Over 10 / Not Available

[Printable Map](#) [Legend](#)

National Commentary

- ID/Scouting Tools
- Not sure if it is Rust?
- Other SBR Sites
- Hurricane Animations
- Observation Animations
- Partners
- Professional Societies
- Soybean Rust: Scout Before

Good Farming Practices Documentation Tool

[Instructions](#)

Report Date: August 25, 2006

Disclaimer: Use of this documentation tool is strictly voluntary. Information entered by you is not retained on this system and may only be printed or saved on your system in a PDF format. RMA does not control or guarantee the accuracy, relevance, timeliness, or completeness of this information. Neither RMA nor any of its employees makes any warranty, express or implied, including the warranties of fitness for a particular purpose, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of this tool.

First time users are strongly encouraged to read the instructions prior to using this documentation tool.

Preparer Name
Grower Name
State *
County *
Farm Description
Field ID(s)
Crop *
Crop Stage * [Crop Stage Images](#)

* = Required

Louisiana Scouting and Management Commentary

Soybean Rust

- August 23, 2006: ASR was found in Concordia Parish in a commercial field (which also contains the soybean sentinel plot) of Group V soybeans at the R6 stage. Incidence and severity levels were low. This brings to eight (8) the number of parishes in which ASR has been found on either soybeans or kudzu. The recommendation is for soybeans in the R1 through R5 growth stages and have a good yield potential be treated with a rust fungicide. The fungicides for rust control have a triazole alone or in combination with a strobilurin. These products are listed in the 2006 Plant Disease Management Guide and are on the LSU AgCenter Rust website, <http://www.lsuagcenter.com/soybeanrust>. Again, it is especially important at this time to monitor your crop very carefully and be alert for reports of disease outbreaks in the area. You can monitor the AgCenter's website (<http://www.lsuagcenter.com/soybeanrust/>), contact your county agent, or call the Asian Soybean Rust Hotline at 1-800-516-0865.
- August 18, 2006: On August 18th ASR was confirmed in Iberia and St. Mary Parishes. The finds were on soybeans the growth stage was R5. On August 15th ASR was confirmed in two parishes, Assumption and Terrebonne.

Extension Platform
and Education

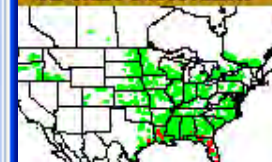
Sign Up For Alerts

Aug 25, 2006

Legumes/Kudzu

Soybean Rust

SB Rust Observation



SB Rust State Update

Chronology of Positive
Detections

SBR Forecast

[Click For Details...](#)

Management Toolbox

- [Tactics - USA](#)
- [Guidelines - USA](#)
- [GFP Tool](#)
- [Insurance Docs](#)
- [Commentary Chron](#)

Forecast?



- So what WILL happen in FY 2009 and FY 2010?



Summary

- CSREES expects to continue to support competitive research, the Regional IPM Centers, NPDN and the PIPE;
- USDA NPLs will continue to be involved in the management of these efforts;
- PIPE and NPDN databases will learn to 'cross-talk' to avoid data entry duplication;
- PIPE will need to grow, but in the near term Soybean Rust will continue to be the central focus.
- Funding is at a critical stage – may require creativity and partnering!



More detailed information is
available.

We welcome your questions &
comments!

Contact: Kitty Cardwell or Marty Draper
kcardwell@csrees.usda.gov &
mdraper@csrees.usda.gov

